

### REMARKS

Claims 4, 5, 7, 16, 17 and 19-24 remain pending in the present application. Reconsideration is respectfully requested.

### *CLAIM OBJECTIONS*

In accordance with the Examiner's request, claims 4 and 17 have been amended to recite the phrase "specific gravity" as opposed to gravity.

### *REJECTIONS UNDER 35 USC §103*

The Examiner has rejected claims 4, 5, 6, 16, 17, 19 and 20-24 as being obvious over GB patent 2197341 to Quain (Quain) in view of the Handbook of Brewing and in further view of applicants' own admission on pages 1-4 of the application as filed.

Regarding claims 4 and 17, the Examiner states that Quain teaches a method of brewing beer by suspending yeast in a wort-free aqueous solution. However, this is incorrect. As stated in the application as filed, Quain teaches a method of fermenting wort where the pitching yeast is exposed to oxygen until the yeast reaches its maximum rate of oxygen consumption. Nothing in Quain teaches the use of a wort-free aqueous solution, as recited in the present claims. Further, nothing in Quain teaches or suggests that modifying the method of Quain to include a wort-free aqueous solution would be feasible, let alone successful.

The Examiner concedes that Quain is silent regarding the specific gravity for aeration and pitching recited in claims 4 and 17. However, the examiner goes on to allege that it would have been obvious to use the method of Quain with the gravity values taught for pitching in the Handbook of Brewing. However, as discussed above, Quain does not teach or suggest the use of a wort-free aqueous solution. Therefore, Applicants respectfully submit that it would not be obvious to modify Quain, even in combination with the specific gravities taught by the Handbook of Brewing.

The Examiner further concedes that Quain is silent regarding the addition of cereal sugars to the yeast suspension as cited in claims 4 and 17. Again, the Examiner alleges that the Handbook of Brewing teaches the teaches the carbohydrate requirement of sugars like sucrose, maltose and maltotriose. Therefore, the Examiner alleges that it would have been obvious to add maltose and maltotriose to the aqueous suspension for aerating yeast. However, as discussed above, Quain does not teach or suggest the use of a wort-free aqueous solution. Therefore, Applicants respectfully submit that it would not be obvious to modify Quain, even in combination with the teachings of the Handbook of Brewing.

Regarding claims 5 and 20, the Examiner concedes that Quain is silent regarding the addition of zinc to the yeast suspension. However, the Examiner alleges that "Applicants admit that the prior art has added zinc to yeast fermentations to enhance the fermentation rate." The Examiner goes on to allege that the Handbook of Brewing teaches that adding zinc to water is well known in brewing

processes. Regarding Applicants specification, a close reading shows that Applicants concede that "another approach to enhancing fermentation is by adding zinc to the yeast/wort solution as disclosed in U.S. patents 3,164,472 and 4,840,802." (page 3, lines 1-4). Nothing in Applicants specification discloses prior art teaching the use of a wort-free aqueous solution; in fact, Applicants claims are the first to disclose this novel approach. Further, what neither Quain nor the Handbook of Brewing teach or suggest is the addition of zinc to a wort-free aqueous solution, as recited in the present claims. Therefore, Applicants respectfully submit that claims 5 and 20 are not obvious in view of Quain, the specification or the Handbook of Brewing.

Regarding claim 7, the Examiner cites Quain as teaching a non-aerated wort. However, claim 1, from which claim 7 depends, clearly recites the use of a wort-free aqueous solution. As discussed above, nothing in Quain teaches or suggests this limitation. Therefore, Applicants submit that claim 7 cannot be obvious in view of Quain.

Regarding claim 16, the Examiner cites Quain as teaching that the gas is delivered above a maximum oxygen uptake rate of the yeast. However, claim 1, from which claim 16 depends, clearly recites the use of a wort-free aqueous solution. As discussed above, nothing in Quain teaches or suggests this limitation. Therefore, Applicants submit that claim 16 cannot be obvious in view of Quain.

Regarding claim 17 (e), the Examiner cites Quain as teaching the monitoring of wort for an end of fermentation wherein the end of fermentation is reached in a shorter time. However, as discussed above, step (a) of claim 17 clearly recites the use of a wort-free aqueous solution. As discussed above, nothing in Quain teaches or suggests this limitation. Therefore, Applicants submit that claim 17, step (e) cannot be obvious in view of Quain.

Regarding claims 21-24, the Examiner cites Quain as teaching suspending yeast in an aqueous medium to oxygenate. The Examiner concedes that Quain is silent regarding the use of maltose and maltotriose. The Examiner goes on to state that the Handbook of Brewing teaches the carbohydrate requirement of sugars like sucrose, maltose and maltotriose. Therefore, the Examiner alleges that it would have been obvious to add maltose and maltotriose to the aqueous suspension for aerating yeast. However, claims 21 and 22 depend from claim 17, and claims 23 and 24 depend from claim 1, both of which, as discussed above, clearly recite the use of a wort-free aqueous solution. Quain does not teach or suggest the use of such a solution. Therefore, Applicants respectfully submit that claims 21-24 are not obvious in view of Quain, even in combination with the teachings of the Handbook of Brewing.

*CONCLUSION*

Accordingly, it is respectfully submitted that claims 4, 5, 7, 16, 17 and 19-24 are patentable over the cited references. Favorable reconsideration is respectfully requested.

A petition for a three-month extension of time is enclosed herewith. No other fees are believed to be needed for this amendment. However, if other fees are needed, please charge them to deposit account 17-0055.

Respectfully submitted,

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